What is claimed:

1. A method for producing a purified vegetable protein material having low concentrations of ribonucleic acids, comprising:

forming an aqueous slurry of a vegetable protein material;

treating the slurry with an acid phosphatase enzyme at a temperature, a pH, and for a time period effective to degrade ribonucleic acids in the vegetable protein material; and

washing the treated slurry to provide a vegetable protein material having a reduced concentration of ribonucleic acids.

2. The method of claim 1 wherein said vegetable protein material is a vegetable protein concentrate or a vegetable protein isolate.

3. The method of claim 2 wherein said vegetable protein material is a soy protein concentrate or a soy protein isolate.

4. The method of claim 1 wherein said slurry contains from about 2% to about 30% of the protein material by weight.

5. The method of claim 4 wherein said slurry contains from about 5% to about 20% of the protein material by weight.

6. The method of claim 4 wherein said slurry contains from about 10% to about 18% of the protein material by weight.

7. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade a majority of ribonucleic acids in said vegetable protein material.

8. The method of claim 7 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which a majority of ribonucleic acids have been removed.

9. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade at least 60% of ribonucleic acids in said vegetable protein material.

10. The method of claim 9 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 60% of ribonucleic acids have been removed.

11. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade at least 70% of ribonucleic acids in said vegetable protein material.

12. The method of claim 11 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 70% of ribonucleic acids have been removed.

13. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade at least 80% of ribonucleic acids in said vegetable protein material.

14. The method of claim 13 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 80% of ribonucleic acids have been removed.

15. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade substantially all of ribonucleic acids in said vegetable protein material.

16. The method of claim 15 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which substantially all of ribonucleic acids have been removed.

17. The method of claim 1 wherein treatment of said slurry with said enzyme is effective to degrade phytic acid and phytates in said vegetable protein material.

18. The method of claim 17 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which phytic acid and phytates have been removed.

19. The method of claim 1 wherein said slurry is treated with an acid phosphatase at a pH of from about 3 to about 6.

20. The method of claim 19 wherein said slurry is treated with an acid phosphatase at a pH of from about 3.5 to about 5.5.

21. The method of claim 19 wherein said slurry is treated with an acid phosphatase at a pH of from about 4 to about 5.

22. The method of claim 19 wherein said slurry is treated with an acid phosphatase at a pH of from about 4.4 to about 4.6.

23. The method of claim 1 wherein said slurry is treated with an acid phosphatase at a temperature of from about 20°C to about 70°C.

24. The method of claim 23 wherein said slurry is treated with an acid phosphatase at a temperature of from about 40°C to about 55°C.

25. The method of claim 1 wherein said slurry is treated with an acid phosphatase wherein said acid phosphatase has an activity of about 600 KPU/g of curd solids to about 1400 KPU/g of curd solids.

26. The method of claim 1 wherein said slurry is treated with an acid phosphatase wherein said acid phosphatase is present in said slurry from about 0.1% to about 10% of the protein material by dry weight.

27. The method of claim 26 wherein said slurry is treated with an acid phosphatase wherein said acid phosphatase is present in said slurry from about 0.3% to about 5% of the protein material by dry weight.

28. The method of claim 1 wherein said slurry is treated with an acid phosphatase for a period of from about 30 minutes to about 4 hours.

29. The method of claim 28 wherein said slurry is treated with an acid phosphatase for a period of from about 45 minutes to about 3 hours.

30. The method of claim 1 further comprising a step of drying said treated and washed slurry to provide a purified vegetable protein material.

31. The method of claim 1 further comprising a step of heat treating said treated slurry.

32. The method of claim 1 further comprising a step of treating said washed and acid phosphatase treated vegetable protein slurry with a protease enzyme at a temperature, pH, and for a time sufficient to hydrolyze said protein in said slurry.

33. The method of claim 32 wherein said protease enzyme is present in said slurry in a concentration of from about 0.1% to about 10% of the protein in said slurry by dry weight.

34. The method of claim 32 further comprising the step of heat treating the hydrolyzed protein slurry.

35. The method of claim 32 further comprising the step of drying the hydrolyzed protein material after hydrolysis with said protease enzyme.

36. The method of claim 1 wherein said treatment of said vegetable protein material slurry with an acid phosphatase and said wash of said treated slurry are effective to lower the mineral content in the vegetable protein material.

37. A method for producing a purified vegetable protein material having low concentrations of ribonucleic acids, phytic acid, and phytates, comprising:

forming an aqueous slurry of a vegetable protein material;

treating the slurry with an acid phosphatase enzyme and a phytase enzyme at a temperature, a pH, and for a time period effective to degrade ribonucleic acids, phytic acid, and phytates in the vegetable protein material; and

washing the treated slurry to provide a vegetable protein material having reduced concentrations of ribonucleic acids, phytic acid, and phytates.

38. The method of claim 37 wherein said vegetable protein material is a vegetable protein concentrate or a vegetable protein isolate.

39. The method of claim 38 wherein said vegetable protein material is a soy protein concentrate or a soy protein isolate.

40. The method of claim 37 wherein said slurry contains from about 2% to about 30% of the protein material by weight.

41. The method of claim 40 wherein said slurry contains from about 5% to about 20% of the protein material by weight.

42. The method of claim 40 wherein said slurry contains from about 10% to about 18% of the protein material by weight.

43. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade a majority of ribonucleic acids in said vegetable protein material.

44. The method of claim 43 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which a majority of ribonucleic acids have been removed.

45. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade at least 60% of ribonucleic acids in said vegetable protein material.

46. The method of claim 45 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 60% of ribonucleic acids have been removed.

47. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade at least 70% of ribonucleic acids in said vegetable protein material.

48. The method of claim 47 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 70% of ribonucleic acids have been removed.

49. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade at least 80% of ribonucleic acids in said vegetable protein material.

50. The method of claim 49 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which at least 80% of ribonucleic acids have been removed.

51. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade substantially all of ribonucleic acids in said vegetable protein material.

52. The method of claim 51 wherein washing the treated slurry is effective to remove said degraded ribonucleic acids to provide a vegetable protein material from which substantially all of ribonucleic acids have been removed.

53. The method of claim 37 wherein treatment of said slurry with said enzymes is effective to degrade phytic acid and phytates in said vegetable protein material.

54. The method of claim 53 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which phytic acid and phytates have been removed.

55. The method of claim 53 wherein treatment of said slurry with said enzymes is effective to degrade at least a majority of phytic acid and phytates in said vegetable protein material.

56. The method of claim 55 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which at least a majority of phytic acid and phytates have been removed.

57. The method of claim 53 wherein treatment of said slurry with said enzymes is effective to degrade at least 75% of phytic acid and phytates in said vegetable protein material.

58. The method of claim 57 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which at least 75% of phytic acid and phytates have been removed.

59. The method of claim 53 wherein treatment of said slurry with said enzymes is effective to degrade at least 85% of phytic acid and phytates in said vegetable protein material.

60. The method of claim 59 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which at least 85% of phytic acid and phytates have been removed.

61. The method of claim 53 wherein treatment of said slurry with said enzymes is effective to degrade substantially all of phytic acid and phytates in said vegetable protein material.

62. The method of claim 61 wherein washing the treated slurry is effective to remove said degraded phytic acid and phytates to provide a vegetable protein material from which substantially all of phytic acid and phytates have been removed.

63. The method of claim 37 wherein said slurry is treated with an acid phosphatase and a phytase at a pH of from about 3 to about 6.

64. The method of claim 63 wherein said slurry is treated with an acid phosphatase and a phytase at a pH of from about 3.5 to about 5.5.

65. The method of claim 63 wherein said slurry is treated with an acid phosphatase and a phytase at a pH of from about 4 to about 5.

64. The method of claim 63 wherein said slurry is treated with an acid phosphatase and a phytase at a pH of from about 4.4 to about 4.6.

65. The method of claim 37 wherein said slurry is treated with an acid phosphatase and a phytase at a temperature of from about 20°C to about 70°C.

66. The method of claim 65 wherein said slurry is treated with an acid phosphatase and a phytase at a temperature of from about 40°C to about 55°C.

67. The method of claim 37 wherein said slurry is treated with an enzyme preparation containing an acid phosphatase and a phytase wherein said enzyme preparation has an activity of about 600 KPU/g of curd solids to about 1400 KPU/g of curd solids.

68. The method of claim 37 wherein said slurry is treated with an enzyme preparation containing an acid phosphatase and a phytase wherein said enzyme preparation is present in said slurry from about 0.1% to about 10% of the protein material by dry weight.

69. The method of claim 68 wherein said enzyme preparation is present in said slurry from about 0.3% to about 5% of the protein material by dry weight.

70. The method of claim 37 wherein said slurry is treated with an enzyme preparation containing an acid phosphatase and a phytase for a period of from about 30 minutes to about 4 hours.

71. The method of claim 70 wherein said slurry is treated with said enzyme preparation for a period of from about 45 minutes to about 3 hours.

72. The method of claim 37 further comprising a step of drying said treated and washed slurry to provide a purified vegetable protein material.

73. The method of claim 37 further comprising a step of heat treating said enzymatically treated slurry.

74. The method of claim 37 further comprising a step of treating said washed and enzymatically treated vegetable protein slurry with a protease enzyme at a temperature, pH, and for a time sufficient to hydrolyze said protein in said slurry.

75. The method of claim 74 wherein said protease enzyme is present in said slurry in a concentration of from about 0.1% to about 10% of the protein in said slurry by dry weight.

76. The method of claim 74 further comprising the step of heat treating the hydrolyzed protein slurry.

77. The method of claim 74 further comprising the step of drying the hydrolyzed protein material after hydrolysis with said protease enzyme.

78. The method of claim 37 wherein said treatment of said vegetable protein material slurry with an acid phosphatase and a phytase and said wash of said treated slurry are effective to lower the mineral content in the vegetable protein material.